

PUBLIC HEALTH DEPARTMENT[641]

Adopted and Filed

Pursuant to the authority of Iowa Code section 105.4, the Plumbing and Mechanical Systems Board of the Department of Public Health hereby amends Chapter 25, “State Plumbing Code,” Iowa Administrative Code.

The amendments update the state plumbing code from the 2012 edition of the Uniform Plumbing Code (UPC) to the 2015 edition of the Uniform Plumbing Code. The Plumbing and Mechanical Systems Board adopts all existing amendments to the Uniform Plumbing Code as well as adopts additional amendments to the 2015 UPC.

Notice of Intended Action was published in the Iowa Administrative Bulletin as **ARC 2317C** on December 23, 2015. A public hearing was held on January 12, 2016. No one attended the hearing. One written comment was received pointing out an additional reference to the International Building Code that needed to be updated from the 2012 edition to the 2015 edition.

Minor changes have been made from the amendments that were published under Notice of Intended Action. In Item 1, the copyright statement for the International Plumbing Code (IPC) has been modified in accordance with the IPC publication permission guidelines. In Item 5, the word “pipe” has been added after the word “waste” in paragraph 25.4(3)“b” for clarification. In relettered paragraph 25.4(3)“h” in Item 7, the reference to the International Building Code has been updated from the 2012 version to the 2015 version. In Item 8, the table for minimum number of required plumbing fixtures has been updated to match the 2015 version of Table 403.1 from the International Plumbing Code. The only substantive change to the table is in the lettered table endnotes. In Item 9, references to the International Plumbing Code have been updated.

These rules are subject to waiver under the Board’s general waiver provisions contained in 641—Chapter 31.

The Plumbing and Mechanical Systems Board of the Department of Public Health adopted these amendments on February 15, 2016.

After analysis and review of this rule making, no impact on jobs has been found.

These amendments are intended to implement Iowa Code section 105.4.

These amendments will become effective June 1, 2016.

The following amendments are adopted.

ITEM 1. Amend rule 641—25.1(105) as follows:

641—25.1(105) Adoption. Section 101 and Chapters 2 to 17 of the Uniform Plumbing Code, ~~2012~~ 2015 Edition, as published by the International Association of Plumbing and Mechanical Officials, 4755 E. Philadelphia Street, Ontario, California 91761-2816, are hereby adopted by reference with amendments as the state plumbing code authorized by Iowa Code section 105.4 ~~as amended by 2013 Iowa Acts, Senate File 427, section 5.~~ Portions of this chapter reproduce excerpts from the ~~2012~~ 2015 International Plumbing Code, ~~International Code Council, Inc., Copyright 2014;~~ Washington, D.C.; International Code Council. Such excerpts are reproduced with permission, all rights reserved. www.ICCSAFE.org

ITEM 2. Amend rule 641—25.3(105) as follows:

641—25.3(105) Fuel gas piping. Fuel gas piping shall comply with the requirements of Chapter 12 of the Uniform Plumbing Code, ~~2012~~ 2015 Edition, unless the provisions conflict with 661—Chapter 226, Liquefied Petroleum Gas, Iowa Administrative Code. Where Chapter 12 conflicts with 661—Chapter 226, the provisions of 661—Chapter 226 shall be followed.

ITEM 3. Amend subrule 25.4(2) as follows:

25.4(2) The following ~~amendment~~ amendments shall apply to UPC Chapter 3:

a. Subsection 301.4.1 Permit Application. Delete the subsection.

b. Subsection 314.4.1 Installation of Thermoplastic Pipe and Fittings. Trench width for thermoplastic pipe shall be limited to six times the outside diameter of the piping at the base. Thermoplastic piping shall be bedded in not less than 4 inches (102 mm) of aggregate bedding material supporting the pipe. Initial backfill shall encompass the pipe. Aggregate material shall be three-eighths (3/8) inch p-gravel or 1-inch clean class one bedding.

ITEM 4. Reletter paragraphs **25.4(3)“a”** to **“e”** as **25.4(3)“g”** to **“k.”**

ITEM 5. Adopt the following **new** paragraphs **25.4(3)“a”** to **“f”**:

a. Section 407.3 Limitation of Hot Water Temperature for Public Lavatories. Modify the section by adding the following sentence to the end of the section: “These devices shall be installed at or as close as possible to the point of use.”

b. Section 408.4 Waste Outlet. Modify the section by adding the following exception to the end of the section: “Exception: In a residential dwelling unit where a 2-inch waste pipe is not readily available and approval of the Authority Having Jurisdiction has been granted, the waste outlet, fixture tailpiece, trap and trap arm may be 1½ inch when an existing tub is being replaced by a shower sized per Section 408.6(2). This exception only applies where one shower head rated at 2.5 gpm is installed.”

c. Section 409.4 Limitation of Hot Water in Bathtubs and Whirlpool Bathtubs. Modify the section by adding the following sentence to the end of the section: “These devices shall be installed at or as close as possible to the point of use.”

d. Section 410.3 Limitation of Water Temperature in Bidets. Modify the section by adding the following sentence to the end of the section: “These devices shall be installed at or as close as possible to the point of use.”

e. Section 416.5 Drain. Modify the section by deleting the last sentence, which states: “Where a drain is provided, the discharge shall be in accordance with Section 811.0.”

f. Section 418.3 Location of Floor Drains. Modify the section by adding the following to the end of the section: “(5) Rooms equipped with a water heater.”

ITEM 6. Amend relettered paragraph **25.4(3)“g”** as follows:

g. Subsection 421.1 General. Modify the subsection by deleting “Table 1401.1 of this code” and inserting the following in lieu thereof: “Chapter 11 of the ~~2012~~ 2015 International Building Code.”

ITEM 7. Amend relettered paragraph **25.4(3)“h”** as follows:

h. Section 422.1 Fixture Count. Modify the section by deleting the first paragraph and inserting the following in lieu thereof: “Plumbing fixtures shall be provided in each building, for the type of building occupancy, and in the minimum number shown in Table 403.1 of the International Plumbing Code, reprinted here as Table 422.1. The design occupant load and occupancy classification shall be determined in accordance with Section 1004 of the ~~2012~~ 2015 International Building Code. Required public facilities shall be designated by a legible sign for each sex. Signs shall be readily visible and located near the entrance to each toilet facility.”

ITEM 8. Amend relettered paragraph **25.4(3)“j”** as follows:

j. Table 422.1 Minimum Plumbing Facilities. Delete the table and insert the following table in lieu thereof:

TABLE 422.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES^a
 (Reprinted, with permission,* from the 2012 2015 International Plumbing Code, excerpt from IPC Table 403.1)

NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (Urinals, see Sections 411.0 and 412.0)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAIN ^{e,f} (See Section 415.0)	OTHER
				MALE	FEMALE	MALE	FEMALE			
1	Assembly	A-1 ^d	Theaters and other buildings for the performing arts and motion pictures	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		A-2 ^d	Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	1 per 40	1 per 75		—	1 per 500	1 service sink
			Restaurants, banquet halls and food courts	1 per 75	1 per 75	1 per 200		—	1 per 500	1 service sink
		A-3 ^d	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
			Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750		—	1 per 1,000	1 service sink
			Places of worship and other religious services	1 per 150	1 per 75	1 per 200		—	1 per 1,000	1 service sink
		A-4	Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150		—	1 per 1,000

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				MALE	FEMALE	MALE	FEMALE			
1	Assembly (cont'd)	A-5	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
2	Business	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	1 service sink ^g
3	Educational	E	Educational facilities	1 per 50		1 per 50		—	1 per 100	1 service sink
4	Factory and Industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100		1 per 100		(See Section 416)	1 per 400	1 service sink
5	Institutional	I-1	Residential care	1 per 10		1 per 10		1 per 8	1 per 100	1 service sink
		I-2	Hospitals, ambulatory nursing home recipient	1 per room ^c		1 per room ^c		1 per 15	1 per 100	1 service sink per floor
			Employees, other than residential care ^b	1 per 25		1 per 35		—	1 per 100	—
			Visitors, other than residential care	1 per 75		1 per 100		—	1 per 500	—

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				MALE	FEMALE	MALE	FEMALE			
5	Institutional (cont'd)	I-3	Prisons ^b	1 per cell		1 per cell		1 per 15	1 per 100	1 service sink
			Reformatories, detention centers, and correctional centers ^b	1 per 15		1 per 15		1 per 15	1 per 100	1 service sink
			Employees ^b	1 per 25		1 per 35		—	1 per 100	—
		I-4	Adult day care and child care	1 per 15		1 per 15		1	1 per 100	1 service sink
6	Mercantile	M	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		—	1 per 1,000	1 service sink ^g
7	Residential	R-1	Hotels, motels, boarding houses (transient)	1 per sleeping unit		1 per sleeping unit		1 per sleeping unit	—	1 service sink
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10		1 per 10		1 per 8	1 per 100	1 service sink
		R-2	Apartment house	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units

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				MALE	FEMALE	MALE	FEMALE			
7	Residential (cont'd)	R-3	One- and two-family dwellings	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit
		R-3	Congregate living facilities with 16 or fewer persons	1 per 10		1 per 10		1 per 8	1 per 100	1 service sink
		<u>R-3</u>	<u>One- and two-family dwellings and lodging houses with five or fewer guestrooms</u>	<u>1 per dwelling unit</u>		<u>1 per dwelling unit</u>		<u>1 per dwelling unit</u>	—	<u>1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit</u>
		R-4	Congregate living facilities with 16 or fewer persons	1 per 10		1 per 10		1 per 8	1 per 100	1 service sink
8	Storage	S-1 and S-2	Structures for the storage of goods, warehouses, storehouses and freight depots. Low and Moderate Hazard.	1 per 100		1 per 100		See Section 416	1 per 1,000	1 service sink

a The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by the International Building Code.

b Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted ~~where such room is provided with direct access from each patient sleeping unit and with provisions for privacy provided that each patient sleeping unit has direct access to the toilet room and provision for privacy for the toilet room user is provided.~~

d The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

~~e The minimum number of required drinking fountains shall comply with Table 403.1 and Chapter 11 of the International Building Code.~~

~~f Drinking fountains are not required for an occupant load of 15 or fewer.~~

g For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.

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ITEM 9. Amend relettered paragraph **25.4(3)“k”** as follows:

k. Insert the following text at the end of Chapter 4, ~~reprinted with permission from the 2012 International Plumbing Code:~~

“422.6 Pay Facilities. Where pay facilities are installed and permissible under Iowa law, such facilities shall be in excess of the required minimum facilities. Required facilities shall be free of charge. ~~(Reprinted from IPC 403.3.5)~~

“422.7 Substitution for Water Closets. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies. ~~(Reprinted from IPC~~ the 2015 International Plumbing Code section 419.2)”

ITEM 10. Renumber subrules **25.4(5)** to **25.4(13)** as **25.4(6)** to **25.4(14)**.

ITEM 11. Adopt the following new subrule 25.4(5):

25.4(5) The following amendments shall apply to UPC Chapter 6:

a. Section 603.4.8 Drain Lines. Modify the section by adding the following language to the end of the section: “or in accordance with the manufacturer’s drain-sizing chart for installation.”

b. Section 609.11 Pipe Insulation. Delete sections 609.11 through 609.11.2 and insert the following in lieu thereof:

Section 609.11 Pipe Insulation. Insulation of domestic hot water piping shall be in accordance with the applicable energy conservation code.

c. Section 611.4 Sizing of Residential Softeners. Modify the section by adding the following to the end of the last sentence in the section: “or as specified in the manufacturer’s installation instructions.”

d. Section 612 Residential Fire Sprinkler Systems. Delete sections 612.0 through 612.7.2.

ITEM 12. Amend renumbered subrules 25.4(8) and 25.4(9) as follows:

25.4(8) The following amendment shall apply to UPC Chapter 9:

a. Section 906.7 Frost or Snow Closure. Modify the section by deleting “two (2) inches (50.8 mm)” in the first sentence and inserting “three (3) inches (76.2 mm)” in lieu thereof.

b. Section 908.2.2 Size. Delete the second sentence in this section and insert the following new sentence in lieu thereof: “The wet vent shall be not less than 2 inches (50 mm) in diameter for 6 drainage fixture units (dfu) or less, and not less than 3 inches (80 mm) in diameter for 7 dfu or more.”

25.4(9) The following amendment shall apply to UPC Chapter 10:

a. Table 1002.2 Horizontal Lengths of Trap Arms. Delete the table and insert the following table in lieu thereof:

TABLE 1002.2
Horizontal Lengths of Trap Arms
(Except for Water Closets and Similar Features)^{1,2}

Trap Arm Diameter (inches)	Distance Trap to Vent Minimum (inches)	Length Maximum (feet)
1¼	2½	5
1½	3	6
2	4	8
3	6	12
4	8	12
Exceeding 4	2 × Diameter	12

For SI units: 1 inch = 25.4 mm

Notes:

¹Maintain ¼ inch per foot slope (20.8 mm/m).

²The developed length between the trap of a water closet or similar fixture (measured from the top of the closet flange to the inner edge of the vent) and its vent shall not exceed 6 feet (1829 mm).

b. Section 1014.1.3 Food Waste Disposers and Dishwashers. Modify the section by deleting the second sentence and inserting the following in lieu thereof: “Commercial food waste disposers shall discharge into the building’s drainage system in accordance with the requirements of the Authority Having Jurisdiction.”

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EDITOR’S NOTE: For replacement pages for IAC, see IAC Supplement 3/30/16.